

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1. (Currently Amended) A system that facilitates identifying human interaction comprising a computer processor executing software components, the software components recorded on a computer-readable medium and being executed by the computer processor :

an access control component that controls access to one of a computer-based action and computer-based application; and

an identification component that facilitates determining that access is initiated by a human, the identification component presenting an order-based human interactive proof (HIP) problem to be solved before access is allowed, the order-based problem being a “start to end” HIP and comprising an arrangement of a plurality of objects whereby a user is asked to correctly identify at least a subset of the objects as well as to identify them in a particular order, the order being based at least in part upon a set of instructions provided to the user, and to find a path of a consistent type and identify objects such as characters along the path, wherein at least a first subset of the objects being at least partially obscured by a second subset of objects, and wherein the path of a consistent type comprises a subset of objects which are connected by a consistent type of connector, the connector being selected from a group consisting of any one of arrows, lines, dotted lines, dashed lines, and shapes, and the identification component communicating with an order-based problem database to retrieve order-based problems as needed;

wherein the order-based HIP problem utilizes three-dimensional ordering, and a user is given a three-dimensional image and asked to identify order of characters from front to back, from left to right, and from largest object to smallest object, and wherein size of the characters and/or size of shapes and/or objects employed in the three-dimensional image is varied, and wherein a sufficient number of visual elements that provide hints of correct order and hints of identities of the characters or objects is included in the three-dimensional ordering to make the HIP problem solvable by a human; and

wherein the objects comprise images, pictures, shapes, characters, and other visual elements which are identifiable by a human, and wherein any one of the images, pictures, shapes, characters, and other visual elements vary in at least one of size, dimension, color, and distortion.

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Canceled)

8. (Previously Presented) The system of claim 1, wherein at least a portion of the connectors are obscured by at least one of the following: at least one translucent shape and at least one opaque shape.

9. (Original) The system of claim 8, the at least one translucent shape obscuring larger portions of the connectors.

10. (Original) The system of claim 8, the at least one opaque shape obscuring smaller portions of the connectors.

11. (Previously Presented) The system of claim 1, the connectors being arrows whereby a user is required to identify a connected sequence of arrows, the arrows being of a same type, from a start position to an end position.

12. (Canceled)
13. (Canceled)
14. (Canceled)
15. (Currently Amended) The system of claim 1 ~~12~~, wherein the objects comprise any one of letters and numbers.
16. (Currently Amended) The system of claim 1 ~~12~~, wherein the objects vary in size.
17. (Currently Amended) The system of claim 1 ~~12~~, wherein the image comprises one or more depth clues, the clues comprising any one of shadows, reflections, fog, and partial occlusions.
18. (Original) The system of claim 17, the partial occlusions comprising at least a first object blocking at least a portion of a second object.
19. (Original) The system of claim 17, the shadows being produced by multiple light sources.
20. (Original) The system of claim 1, the order-based problem being a maze HIP wherein a user is required to maneuver an object through a maze configuration from a start position to an end position and to identify characters from a start position to an end position in the maze.
21. (Original) The system of claim 20, the object being a rectangular block.
22. (Original) The system of claim 20, the maze HIP configuration comprising a plurality of objects arranged in such a way as to provide a single path for the object to maneuver through a subset of the plurality of objects to reach the end position.

23. (Original) The system of claim 22, the plurality of objects comprising at least one of geometric shapes, rounded shapes, pointed shapes, angled shapes, and images of real objects.

24. (Original) The system of claim 23, wherein recognition of the images of real objects is required to determine the path for the odd-shaped object.

25. (Currently Amended) A method that facilitates identifying human interaction comprising:

presenting an order-based HIP to a user desiring access to at least one of a HIP-controlled computer-based action and a HIP-controlled computer-based application, the order-based HIP being retrieved from a HIP database;

requesting the user to solve the order-based HIP to gain the access, solving the order-based HIP, comprising:

viewing an image comprising a plurality of objects;

identifying at least a subset of the objects, the subset of objects determined at least in part upon a set of given instructions, wherein at least a first subset of the objects being at least partially obscured by a second subset of objects; and

ordering the at least a subset of the objects, the ordering determined at least in part upon the set of given instructions; ~~and~~

determining whether access should be given based at least in part on the user's response to the HIP;

utilizing three-dimensional ordering in the order-based HIP problem, wherein a user is given a three-dimensional image and asked to identify order of characters from front to back, from left to right, and from largest object to smallest object; and

providing a sufficient number of visual elements that provide hints of correct order and hints of identities of the characters or objects in the three-dimensional ordering to make the HIP problem solvable by a human.

26. (Canceled)

27. (Original) The method of claim 25, the objects comprising any one of the following: shapes, images, letters, and numbers.

28. (Canceled)

29. (Original) The method of claim 25, at least a subset of the objects being distorted.

30. (Original) The method of claim 25, further comprising allowing access to at least one of the computer-based action and computer-based application when an acceptable answer to the HIP is given.

31. (Original) The method of claim 30, the acceptable answer being at least one of the following:

a correct answer; and

an answer consistently received from a percentage of users, whereby the percentage exceeds a minimum threshold.

Claims 32-70 (Canceled)